

Key Site
GULF OF MEXICO



Surveillance

Weather



Air Traffic Control



Communication



ADS-B

AUTOMATIC DEPENDENT SURVEILLANCE - BROADCAST



Gulf of Mexico

Infrastructure <ul style="list-style-type: none"> • 21 ADS-B ground radio stations <ul style="list-style-type: none"> – Installed on oil platforms and along the shore • 35 new weather stations • 10 existing VHF communication stations • 9 new VHF communication stations 	Service Volumes (Communications and Surveillance) <ul style="list-style-type: none"> • Low altitude en route service volume over oil platforms <ul style="list-style-type: none"> – Floor: 1,500 ft. mean sea level; ceiling: 60,000 ft • High altitude en route service volume <ul style="list-style-type: none"> – Floor: 28,000 ft. mean sea level; ceiling: 60,000 ft
Services <ul style="list-style-type: none"> • Air traffic control separation services <ul style="list-style-type: none"> – ADS-B / ADS-R for low altitude up to 24,000 ft. – ADS-B 1090-ES only for high altitude above 24,000 ft. • VHF voice communications (ground to air) • Automated Weather Observation Services • Flight Information Broadcast Services (FIS-B) Interface Protocols <ul style="list-style-type: none"> • Common Digitizer-2 as a virtual radar for integration with legacy automation • Asterix Category 33 for position data report and Asterix Category 023 service status reports 	Service Delivery <ul style="list-style-type: none"> • Primary service delivery point : HOST automation system at Houston Center (future compatible with ERAM) • Other service delivery point: <ul style="list-style-type: none"> – Surveillance and Broadcast Services monitor receives service status reports and equipment status reports, as well as ADS-B and FIS-B data – FAA monitoring takes place at the William J. Hughes Technical Center and the Aeronautical Center – Service certification is at the service delivery point for each automation platform
Applications <ul style="list-style-type: none"> • Air traffic control surveillance • Weather reporting for instrument flight rules flights • Voice communications (controller / pilot) • Enhanced visual acquisition • Weather and NAS situational awareness 	Benefits <ul style="list-style-type: none"> • High altitude <ul style="list-style-type: none"> – Increased capacity – Optimal routing • Low altitude <ul style="list-style-type: none"> – Increased capacity – Reduction in weather-related accidents – Improved search and rescue
Schedule <ul style="list-style-type: none"> • Initial Operating Capability (IOC) – Completed December 2009 	02.2010.rev2

